

74. REDUCTION OF SICILY—COASTAL OPERATIONS

(Ref. Plans 1, 24.)

Operations for the final reduction of Sicily commenced after the fall of Palermo (22nd July) when the Army regrouped for an advance along the north coast to break through the enemy line San Stefano—Nicosia.

25th July—D + 15

M.T. Bron 15 engaged F-lighters off the Italian coast, two were believed to have been sunk.

General Patton proposed to Vice-Admiral Hewitt the execution of a series of amphibious landings in the rear of the enemy's positions on the North Sicilian coast. The operations would be mounted at Palermo with naval cover and support.

26th July—D + 16

The 45th Infantry Division reached the road junction north of San Mauro. In an air attack on Palermo (0926) the *Mayrant* (D.D.) was badly damaged by near misses.

27th July—D + 17

The Army's advance reached Castel di Tusa, five miles west of San Stefano and San Mauro. The suggested "leap-frog" landings were approved by the Com. 8th Fleet. Under the command of Rear-Admiral L. A. Davidson Task Force 88 was created to "support the eastward advance of the 7th Army by gunfire support and by effecting advance landings of military units."

The organization of T.F. 88 was:

Cru. Div 8.

Philadelphia (Flag).

Savannah (30th July/
8th August).

Boise (9th/18th August).

Des. Ron. 8.

Wainwright (F).¹

Rhind.

Rowan.

Trippe.

Des. Div. 34.

Gherardi (F).

Butler.

Shubrick.

Des. Ron. 7.

Plunkett (F). *Ludlow.*

Benson.

Gleaves.

Bristol.

Edison.

Knight.

} available
as convoy
escorts.

Landing craft

2 L.S.T.s .. } Due to damage ; replacements in this group were
10 L.C.I.s .. }
7 L.C.T.s .. } 3 L.S.T.s and 5 L.C.T.s.

Escort craft

4 P.C.s, 6 S.C.s, 4 Y.M.S.s (2 P.C.s were replaced).

The landing and escort craft were pooled with those assigned to the defence of Palermo.

¹ (F) indicates the Senior Officer's ship of a destroyer division or squadron.

28th July—D + 18

The opening up of Palermo Harbour progressed well and congestion caused by wrecked vessels blocking the port was gradually being eased. M.T. Bron 15 engaged enemy shipping off the north-east coast of Sicily scoring hits, but exact results were not known. The troops advancing along the north coast encountered stiff resistance.

29th July—D + 19

All submarines were withdrawn from the areas immediately north of Sicily and surface forces were ordered to patrol the Messina Straits. M.T. Bron 15 engaged E-Boats and F-Lighters scoring many hits, but no sinkings were claimed.

The Army captured an enemy position four miles east of the Tusa River. One infantry unit was moved south to Mistretta while another moved to outflank the enemy at San Stefano, the *Rowan* covering the advance.

30th and 31st July—D + 20 and D + 21

The naval force supported the Army's movements with intensified gunfire along the coast. The principal target was San Stefano until it was taken on 31st July. The *Philadelphia*, with aircraft spotting, bombarded positions on the coastal road and engaged a 6-in. battery. Though twice attacked from the air she was not damaged.

1st August—D + 22

Palermo was bombed by enemy aircraft.

The 3rd Infantry Division after relieving the 45th Division advanced about four miles east of San Stefano. Positions between San Stefano and Caronia were consolidated preparatory to resuming the advance. The *Savannah* and *Rowan* bombarded the enemy's positions.

2nd August—D + 23

During the night the *Philadelphia*, *Rowan* and *Knight* effectively bombarded the coastal highway and a strong point near San Agata.

In 36° 52' N., 12° 08' E. the *Buck* (D.D.), while escorting six supply ships, attacked and sank the Italian submarine *Argento*.

3rd August—D + 24

During daylight the *Philadelphia*, *Savannah*, *Gherardi* and *Rhind* shelled an area near San Agata, and aided the 3rd Division in reaching a position two miles from the Furiano River westward of San Fratello.

4th August—D + 25

In an air attack on Palermo, the *Shubrick* (D.D.) was damaged and had 2 killed, 15 wounded. The *Mayrant* was damaged again and an L.S.T. was sunk.

Enemy artillery concentrated on the coastal road, when the 15th R.C.T. attacked unsuccessfully under cover of naval gunfire. This unit then moved up the valley searching for a more favourable route over the Furiano River. Later, as the 1st Infantry Division's attack on Troina gained momentum, the 7th R.C.T. with artillery was transported in landing craft to the area behind the 15th R.C.T. The *Savannah* bombarded San Agata, Cape Orlando, Highway 113, bridges and defiles in the area, a shore battery at Cape Orlando replied. During the night the *Gherardi* and *Rhind* bombarded enemy positions near San Agata.

The island of Ustica surrendered to a small force consisting of the *Plunkett*, *Gleaves* and an L.C.I. (L).

5th August—D + 26

The 3rd Infantry Division continued its attack towards San Agata and the San Fratello ridge. The *Savannah*, *Rowan* and *Trippe* fired on enemy positions between San Agata and Cape Orlando, enemy batteries replied from the latter point.

6th August—D + 27

Little damage was done by a night raid on Palermo, which was broken up by our night fighters. Five E-Boats were dispersed by the destroyer patrol outside the harbour.

The *Savannah* and *Rowan* bombarded enemy positions ahead of our troops, who made an unsuccessful attempt to force a crossing of the Furiano River.

7th August—D + 28

Near the coast, the Army encountered strong resistance and was counter-attacked north of San Fratello. The *Savannah* and *Philadelphia*, with their aircraft spotting, heavily bombarded the San Agata and Cape Orlando areas, where enemy concentrations and a freight train came under accurate fire.

8th August—D + 29

Before daylight, a force consisting of a battalion of infantry, one tank platoon and two batteries of field artillery, was landed near Terranova at a point about six miles southward of Cape Orlando. The naval force employed consisted of two L.S.T.s, one L.C.I. (L) and seven L.C.T.s with escorts. The *Philadelphia*, *Savannah*, *Rhind*, *Rowan* and *Trippe* supported this operation, shore fire control parties directing their fire. The landing surprised the enemy who offered very little opposition. The enemy's line was soon broken, 1,200 prisoners and much equipment being taken. The 3rd Division then quickly won the heights of Monte Fratello and occupied the towns of San Fratello and San Agata. The only naval loss was one L.C.V.P. During the day, the *Philadelphia*, with Army aircraft spotting, shelled positions near Cape Orlando, and with the *Savannah* scored hits on road and railway objectives. An enemy battery replied, firing at a range of 16,000 yards.

9th August—D + 30

The 3rd Division continued to advance slowly over heavily mined areas as the enemy withdrew east of the Zappula River. The *Benson* and *Brant* fired on each other through failure of recognition. Enemy aircraft bombed landing craft assembled at Caronia striking an L.S.T. Two F.W.190s were shot down.

10th August—D + 31

The clearance of Palermo Harbour having progressed well it was estimated the port would be open in a month for reception of large ships. At least 27 sunken craft still blocked the channels and salvage operations were handicapped by lack of air cover. Two out of five F.W.190s were shown down in a low level bombing attack on landing craft at Caronia.

After repelling a counter-attack our troops crossed the Zappula River. The enemy appeared to be preparing to defend the line Cape Orlando—Naso.

11th August—D + 32

At 0300, a second amphibious landing was made two miles east of Cape Orlando in the enemy's rear. The force landed, consisting of an infantry battalion with armoured artillery and tanks, captured a position astride the highway and railroad two miles west of Brolo. This operation broke strong enemy defence lines along the ridge from Cape Orlando to Naso. The naval force consisted of one L.S.T., two L.C.I.s (L) and six L.C.T.s with escorts. The *Philadelphia*, *Boise*, *Rowan*, *Rhind* and *Trippe* supported the operation, which was resisted by artillery situated in the hills and by 20-mm. guns in pill boxes on the beach. The ships' fire completely neutralised that of the enemy which was sporadic and inaccurate. In daylight, the *Philadelphia* broke up a German counter-attack threatening the forces which had just landed. Later she shelled the road east of Brolo and west of Cape Orlando, expending altogether 1,062 rounds of 6-in. ammunition. The enemy's return fire all fell short. This successful operation defeated the last determined stand of the enemy on the north coast.

12th August—D + 33

The 3rd Division moved forward to Cape Orlando and joined the force landed west of Brolo. Covered by the *Boise*'s fire, the 30th R.C.T. swept on rapidly along the coast road capturing Brolo and Ficarra five miles to the southward. The *Benson* and *Plunkett* at night bombarded enemy forces falling back along the coast road between Brolo and Patti. The enemy now began to evacuate from Messina on an increasing scale; P.T.s and M.T.B.s operating in and near the Straits of Messina were correspondingly more aggressive.

13th August—D + 34

The 3rd Division advanced to within two miles of Patti. At the eastern end of the Calava tunnel, the advance was checked by a large crater in the road. This block was by-passed, by embarking the troops with artillery and vehicles in L.C.T.s and ferrying them round the Cape.

14th August—D + 35

The *Boise*, *Rowan* and *Benson* heavily bombarded a concentration of enemy artillery, motor transport and grounded aircraft near Milazzo. Advancing rapidly along the coast road our troops, after capturing Oliveri and Falcone, reached a position three miles east of Barcellona. During the night the *Plunkett* and *Gleaves* shelled enemy forces retreating on the coast road.

15th August—D + 36

Spadafora, twelve miles east of Barcellona was captured. Landing craft assembled at Termini and San Stefano embarked troops and vehicles for an amphibious operation to outflank the enemy in full retreat.

16th August—D + 37

In the early morning, the 157th R.C.T. was landed behind our lines. This operation had been planned to take place east of Milazzo, but it was diverted to beaches northwest of Barcellona on account of the rapid advance of the 3rd Division. The naval forces employed consisted of 3 L.S.T.s, 8 L.C.I.s (L) and 13 L.C.T.s with escorts. The operation was covered by the *Philadelphia*, *Boise*, *Bristol* and *Knight* screened by the *Wainwright*, *Rhind*, *Rowan* and *Trippe*.

The troops advanced during the day from Spadafora, reaching Divieto by nightfall.

17th August—D + 38

During the night 16th/17th August, our patrols entered Messina which was occupied in the morning.

The Lipari Islands surrendered to the *Trieste* and six P.T. boats. During the night, naval forces operated against the Italian mainland. The *Philadelphia*, *Plunkett* and *Benson* bombarded Gioia Taura while the *Boise*, *Niblack* and *Gleaves* bombarded Palmi.

Casualties.

The casualties among the U.S. naval personnel in the Sicily campaign were stated as :—

Killed in action or died of wounds	81
Missing in action	239
Wounded in action	478

Those figures were subject to modification. The missing in action include 209 from the *Maddox* who were presumed dead.

75. MAINTENANCE AND BUILD-UP IN THE W.T.F. AREA

The plan of assault allowed for maintenance of the military forces over the beaches for a period of 30 days. The intention, as the army moved westward, was successively to open the ports of Empedocle, Mazzara del Vallo, Marsala, Trapani and Palermo. Movement of the lines of communication entailed a corresponding abandonment of Gela, Licata and those ports named above in sequence. However it was found, after the occupation of Palermo on D + 12 (22nd July) that Marsala and Trapani were neither suitable nor necessary.

Though Gela and Licata were captured on D-day and Porto Empedocle fell on D + 6 (16th July), their total capacity was insufficient and beach maintenance had to be continued at Cent until 20th July and at Dime and Gela until 24th July.

The total numbers of personnel, tonnage and vehicles unloaded over the assault beaches far exceeded any known record hitherto attained in war. Summarized for the 10th–12th July, inclusive, they were :—

	Personnel	D/W Tons	Vehicles
Cent	22,654	7,801	2,179
Dime ¹	23,161	3,351	1,485
Joss	20,470	6,614	3,752
Total	66,285	17,766	7,416

Throughout the period 10th–31st July, approximately 104,134 tons were moved over the beaches, the greatest daily amount being 6,638 tons on 18th July. Palermo was opened to shipping on 28th July, from 3rd August Torremuzzo beach near San Stefano was used for 10 days as a discharge point in rear of the advancing troops. Subsequently supplies, etc. were discharged at San Stefano, Brolo Point and Barcellona beach in step with the army's advance.

¹ Dime beaches closed on 11th July due to enemy counter-attack and re-opened the following day.

Shore-to-Shore Movements and Loadings

Between 6th July and 18th August, the summary of trips made by landing ships and craft, employed in the shore-to-shore assaults, two follow-up movements and continuous ferrying and lightering service, was :—¹

Types	From Tunis	From Bizerta	Total
L.S.T.s	162	252	414
L.C.I.s (L)	72	108	180
L.C.T.s	20	114	134

The loadings at the Tunisian ports were :—

Loadings	Tunis (Assault Force)	Bizerta (Assault Force)	Total (Assault Forces)	Bizerta (Follow-up Forces)	Totals
Personnel	42,723	27,044	69,767	66,847	136,614
Vehicles	8,778	3,500	12,278	17,122	29,400
Tanks	20	230	250	64	314
Guns	76	232	308	426	734
Ammunition and Stores (tons)	6,669	6,677	13,346	7,262	20,608
Aircraft (Cub) ..	—	3	3	16	19
Mules	—	64	64	240	304
Mailbags	—	—	—	5,512	5,512

The above figures are a measure of the tremendous logistic work performed by the landing ships and craft of the W.T.F.

76. OPERATIONS BY TASK FORCE 88

The operations of Task Force 88 were, it is believed, unique in the following particulars :—

- (a) It operated for 22 days from an unprotected anchorage within easy bombing distance of enemy shore-based aircraft.
- (b) Denied to the enemy command of the sea area within which it operated.
- (c) Rendered continued support to the army by bombardment of positions immediately in front of the troops and against the rear of the enemy inaccessible to the army artillery.
- (d) Conducted small scale improvised amphibious operations around the enemy's unprotected seaward flank.
- (e) Ensured the safe and prompt delivery of supplies by sea to the troops when their land supply lines were heavily strained.
- (f) Overcame the obstacles of demolished bridges, blown tunnels and mined roads by moving heavy artillery and armour by sea to keep pace with the advance.

¹ In other ships 2,375 personnel and 979 tons of ammunition were transported from Tunisian ports.

The power of co-ordination and co-operation between sea, land and air forces was thereby demonstrated, for the amphibious operations contributed largely to the early capture of Messina.

During the period of operations, over 20 enemy aircraft were shot down, one F-lighter and two escort vessels damaged. The island of Ustica and the Lipari Islands were taken, with 140 prisoners.

77. SUMMARY

The account of the operations of the Western Task Force has been confined to a brief narrative of the course of events chiefly because of considerations of space. The lessons of the campaign can be studied in Vice-Admiral Hewitt's "Action Report," where, under different headings he reviews in considerable detail the manner, performance and methods by which the operations were carried to a triumphant conclusion by the naval forces under his command. That these subjects are principally technical with particular reference to a United States Naval and Military organization, and also, in some instances, their emphasis is frankly critical of shortcoming and deficiencies, are additional reasons why they are best studied in the original. Selections from a mass of comments possibly might result in presenting errors arising either from condensation or misinterpretation. The "Action Report" clearly illustrates the immensity of the task entailed in landing, maintaining and supporting the land forces in an operation of such magnitude. It was as Vice-Admiral Hewitt writes, "Unique in many respects," of which "the most impressive fact was the vast scale upon which it was launched." His recommendations are finally recapitulated in no less than 178 specific items. The value of these is in the lessons that may be deduced for application to future amphibious operations.

In conclusion Vice-Admiral Hewitt said:—

"The relentless vigour with which the assault was pressed home, regardless of loss or difficulty, merits the highest praise. The initiative, perseverance and loyalty of the officers and men comprising the Western Task Force is acknowledged with pleasure. . . . The co-operation manifested between the army and navy and the comradeship and combat efficiency demonstrated by units of the Royal Navy and the United States Navy in joint action against a common foe presages the ultimate victory of the Allied Nations."

THE INVASION OF SICILY

OPERATION "HUSKY"

PART V

REPORT OF THE INVASION OF SICILY
BY THE COMMANDER-IN-CHIEF, MEDITERRANEAN

CHAPTER XI

SECTIONS 78-79

Appendices A—K

CHAPTER XII

78. STATEMENT OF ALLIED AND ENEMY LOSSES IN THE INVASION OF SICILY

On 21st August, 1943, General Eisenhower, Allied Commander-in-Chief, issued a statement giving the results achieved on the successful invasion of Sicily which terminated in the complete occupation of the island in the remarkably short space of 38 days. The statement, based on estimates, is in round figures which should be regarded as approximations:—

Italian Personnel

Prisoners of war	123,000
Killed	2,000
Evacuated wounded	5,000
Evacuated fit	30,000
Unaccounted	56,000
Total Italian personnel engaged ..	216,000

German Personnel

Prisoners of war	7,000
Killed	5,000
Wounded	20,000
Evacuated	60,000
Total German personnel engaged ..	92,000

Material Losses

	Tanks	Vehicles	Guns	
			A.T. and Field	A.A.
Italian ..	150	1,500	1,060	670
German ..	140	3,500	190	70
	290	5,000	1,250	740

At a press conference on 10th August, General Eisenhower communicated the following figures:—

Aircraft Losses in Combat and on the Ground

Enemy	1,691
Allies	274

Allied Losses from Incomplete Returns

Casualties	25,000
Tanks	103
Guns	251

In the statements quoted above, the figures apparently refer to the results of the land campaign. No final summary has been seen which specified the allied casualties under the headings of nationality, nor any which distinguishes those of the sea, land and air services engaged in the Invasion of Sicily.

79. COMMANDER-IN-CHIEF, MEDITERRANEAN. REPORT ON THE INVASION OF SICILY. (OPERATION "HUSKY.")

In his covering letter to the Report on the Invasion of Sicily, the Commander-in-Chief wrote, that it was not his intention to add a further narrative to those already written, nor to do more than comment on salient points of importance. Except as stated, he concurred fully in the suggestions and recommendations of the force commanders. Here his comments are presented at length:—

Planning

(4) "It is essential, . . . that the responsible Commanders-in-Chief, together with the Task Force Commanders . . . should meet at the outset for the discussion and evolution of a sound basic plan which should not thereafter be changed except for reasons of exceptional urgency . . ."

(5) "In the case of 'Husky' this was not done, since both General Alexander and General Montgomery were absorbed in the Tunisian battle. In consequence, although the operation was authorized on 23rd January and combined headquarters set up on 10th February, the final firm plan was not evolved until 12th May. Thus, . . . all detailed planning had in fact to be compressed into two months, resulting in some confusion and considerable unnecessary duplication in the issue of orders."

(6) "It cannot be too clearly recognized that a combined operation is but the opening, . . . of a purely army battle. It is the function of the navy and of the air to help the army to establish a base or bases on the hostile coast from which the military tactical battle . . . must be developed. It is upon the army tactical plan . . . that the combined plan must depend. The navy and the air commanders must join with the army commander to ensure that the base or bases selected for seizure are capable of achievement without prohibitive loss . . . and that, when seized, they will fulfil the requirements of the force ; . . ."

(7) "It was upon this point that the initial planning of 'Husky' broke down. It may be that the earlier plans would have succeeded equally well; but . . . these plans in the end proved unacceptable to the army leaders . . . and had the tactical aspect been properly studied by those leaders at the outset, the undesirable last minute changes would have been saved."

(8) ". . . in the initial planning great weight was lent to the value of airborne troops for the softening of beach defences. The conditions of light required for the employment of paratroops were inimical to the secure and undetected approach of naval forces. . . . in view of the importance attached to the airborne attack, the date selected for the assault was one which was not favourable from the naval point of view. In fact the airborne troops were never used in the manner projected but that they were not to be so used did not emerge until it was too late to change the date. In consequence, the navies, for no advantage, had to accept a disadvantageous light for approach, and a subsequent period of moonlight nights off the beaches which could have been avoided."

(9) "The Naval Commander, Western Task Force, comments at length and stringently on this subject in Section VI of his despatch. While I do not in all respects agree with his estimate of the effectiveness of naval gunfire, I concur in his concluding remarks . . . and, in particular, in questioning the wisdom of attaching a high degree of importance in the plan to the employment of airborne troops."

"A seaborne assault is unalterably committed to a date for some days in advance of D-day. It may well be that, on the selected date, airborne troops are weather-bound and cannot operate. It does, therefore, appear most necessary that airborne troops should be considered as a useful auxiliary rather than as a governing factor"

(10) "Apart from the use of airborne troops, many other factors affect the selection of D-day and H-hour; but a dominating factor must always be the soldiers' dislike of meeting aimed machine gunfire. Unless it can be guaranteed to the army that the enemy beach defences can be neutralized by naval gunfire or air attack or both—or by smoke—it is felt that darkness will always be chosen for the first waves to reach the beach. 'Husky' gave but poor opportunity for judging the soundness of our choice since surprise was unexpectedly attained: but . . . had the enemy been resolute and alert, it would have required more than the gun support actually available if the soldiers were to be landed in daylight without heavy casualties. Bomber forces were not available since they were occupied in neutralizing the enemy air forces."

Preparation, Training and Mounting

(11) "The training and mounting of 'Husky' proceeded under difficulties particularly in the case of Force 'B' of the Eastern Task Force, and to a lesser extent of the Western Task Force. Both these forces had to establish their base facilities in captured ports which had been considerably demolished. . . . Great credit is due to all concerned that these difficulties were ably surmounted in the time available. Force 'B,' . . . was faced at short notice with the task of capturing Pantellaria, but the task was . . . successfully accomplished without prejudice to 'Husky,' of which operation it was an essential preliminary."

(12) "The reception and absorption in the station of the great number of landing ships and craft, and the establishment of their bases, presented a heavy problem to both navies. The probable performance of these craft, manned as they were by new and inexperienced officers and men . . . gave cause for some anxiety, The manner in which they buckled to and met and overcame their inexperience can best be measured by what they achieved, and deserves the highest praise."

(13) "Another cause of anxiety at this stage was the large demand for movement of troops, airmen and vehicles This involved heavy and continuous running by the landing craft . . . and fear was felt, not only that their training would be inadequate, but that their engines would not stand the strain. These fears were happily disproved, and in fact the sea training provided by these voyages must have stood them in good stead"

(14) "Additional difficulties in the way of training and mounting arose from late arrival of craft and material. This was particularly so in the case of Force 'A' . . . which received its L.S.T.s extremely late and had little or no opportunity of trying and practising with pontoons. This portion of the force was also separated by 900 miles from the L.C.T.s which were to form part of its assault"

(15) "The Western Task Force was more fortunate in that opportunities for training and mounting were undisturbed, and all ships were concentrated. Although this force also suffered . . . from late arrivals and rushed planning, as compared with the Eastern Task Force the Western Task Force was much better placed since the U.S. warships came into the Mediterranean for the specific purpose of the operation, In the case of the Eastern Task Force, all ships belonging as they did to the normal forces of the station, were heavily and continuously employed right up to the date of sailing . . . and in but few cases took part in any rehearsal or training. That their duties were performed so adequately . . . reflects highly alike on the adaptability of their ships' companies and on the standard of maintenance achieved"

Collection of Beach Intelligence

(16) "Much credit is due to the officers and men of the C.O.P.P. beach reconnaissance parties for their arduous and hazardous efforts to obtain details of the beach gradients and sand bars. Credit is also due to the submarines of the 8th and 10th Flotillas which worked on beach reconnaissance in company with the C.O.P.P.s.

" . . . Where sand bars exist there is no present substitute for swimming reconnaissance. . . . Their casualties in this operation were unfortunately heavy;"

Location of Headquarters

(17) "Much discussion was devoted to the best location for the combined headquarters . . . in the end communications problems, and, to a lesser extent, lack of suitable accommodation caused an undesirable dispersion in that though the navy and army headquarters moved to Malta from Algiers, the Air Officer Commanding-in-Chief found himself unable to move from his existing headquarters at Marsa,"

"I am sure Malta was a wise choice from both naval and army viewpoints"

(18) "The separation of the Commanders did not in the event have serious reaction, but . . . might have proved extremely awkward had things begun to go awry. In particular the navy and the air are closely interdependent in a sea assault, and with the exception of the coastal air component, the air plans of the operation had all along appeared . . . to be somewhat nebulous, and their day-to-day exposition was necessary to make the picture clear. This fact is commented upon both by the Naval Commander, Eastern Task Force, in paragraph 26 of Appendix I and by the Naval Commander, Western Task Force, in Part III, paragraph 18 *et seq.* These criticisms are considered to be justified"

The Approach and Assault

(19) "The co-ordination and timing necessary to ensure the punctual concentration of the vast force in the assault areas . . . was to some degree complicated by the great distances over which the forces were initially dispersed, by the need for deceptive routeing to avoid disclosure of intention, by the bottleneck presented by the Tunisian war channel, and, finally by the requirement for topping up the fuel of escort vessels"

"Very detailed orders were issued regarding the routes and timing of the approach. . . . Even so, everything depended, as always, on the seamanship and good sense of individual commanding officers and on the smooth working of the berthing and fuelling organisations. . . . My confidence in their abilities was not misplaced. The operation ran like a well-oiled clock."

(20) "The only incidents which occurred to mar the precision of this remarkable concentration were the loss by submarine attack of three ships in convoy,¹ the *City of Venice* in K.M.S. 18B on the 4th July, the *Devis* in K.M.S. 18B on 5th July, and the *Shahjehan* in M.W.S. 36 on 6th July."

"The passage of the convoys was covered most effectively by . . . the North African Coastal Air Force and 201 Naval Co-operation Group . . . no bomb was dropped on any convoy, the majority were not sighted by enemy aircraft . . . the fighter cover was excellent."

(21) "An aspect of the approach which caused me concern was the slow speed of the L.C.T. convoys and the necessity for their arrival at the assault beaches well before first light to provide the supporting arms the army needed. Throughout the planning stages, the estimates of speed of advance allowable for L.C.T. convoys had continually to be lowered . . . it became clear that not more than 5½ knots could be counted upon . . . I was not sanguine of our ability to maintain surprise at any time after 1200 on D-1, since it appeared beyond doubt that the enemy must by then become aware of our concentration south of Malta: but it appeared to be beyond the wildest expectation that he should be unaware of the L.C.T. convoys which must be within 20 miles of his coast at sunset. It is, I suggest, a matter of urgency that some means be devised of landing supporting arms at an early stage from craft whose speed is at least in the region of that of the average infantry assault ship, if tactical surprise is to be aimed at."

(22) "Little anxiety had been felt on the score of weather. . . . Nevertheless plans had been made whereby a postponement of 24 hours could, if necessary, be ordered as late as 1200 on D-1. Beyond this time it was felt impracticable to disturb the march of events, and it was also expected that in the event the weather would have sufficiently disclosed its intentions by this time. Such was not the case however—at 1200 D-1 the wind was blowing Force 4 from the northwest. . . . By 1700 the wind was Force 6 to 7 and a nasty sea had risen. It was manifestly too late for postponement, but considerable anxiety was felt, particularly for the small craft convoys making up against the sea. The wind mercifully started to ease from 2330 onwards, by H-hour it was slight, and by morning had ceased, leaving only a tiresome swell and surf on the western beaches."

Attainment of Surprise

(23) "This little blow had various effects but the most noteworthy was its contribution to our unexpected success in gaining complete surprise. The very efficient cover plan and the deceptive routeing of convoys both played their parts. In addition the vigilance of the enemy was undoubtedly relaxed owing to the unfavourable phase of the moon. . . . Finally came this wind . . . dangerously close at one time to making some, if not all, of the landings impracticable. These . . . apparently unfavourable factors had actually the effect of making the weary Italians, who had been alert for many nights, turn thankfully in their beds saying 'to-night at any rate they can't come! But they came.'"

¹A third ship was lost by submarine attack on convoy K.M.S. 18B: "St. Essylt," 4th July.

The Landings

(24) "In consequence of the wind not all the assault waves reached the beach at H-hour, but none was seriously late. Some of the L.C.T. convoys were very late, the most being that for Bark North¹. . . . One L.C.T. was swamped and capsized. The performance of the small craft of both nations in this period was most creditable"

(25) "The assaults were landed in all sectors in the right place, nearly at the right time and with negligible opposition. In some, interference was encountered after daylight from coast defence and shore batteries, but in most cases they were readily silenced by ships' gunfire and the landings proceeded steadily. . . . The Western Task Force, on their exposed western beaches, bore the brunt of the opposition both by gunfire and surf. . . . Losses of craft by broaching in this area were considerable. . . ."

(26) "After the landings the troops moved steadily inland on both fronts, apparently encountering but little opposition except inland of Gela in the Dime area . . . where the floating reserve (Kool force) . . . landed in support. A determined counter attack by the Herman Goering Panzer Division started to develop in this area from 0900 on D-day and had some success, reaching almost to the beaches on the evening of D + 1. Naval gunfire played a prominent and praiseworthy part in stopping and turning this attack, being notably effective against tanks. By 2230 on D + 1 the situation had been restored. . . ."

Air Action during the Assault

(27) "The degree of air opposition encountered . . . could by no means be described as serious; but caused some casualties among shipping and had some nuisance value.

In this respect the Western Task Force was less fortunate than the Eastern Task Force . . . fighter bomber aircraft coming low over the hills from inland in such a manner as to evade detection by Radar."

(28) "The provision of south east fighter cover in the assault areas prior to the capture of adequate Sicilian airfields, presented a difficult problem to the Air Command, with only the limited airfield facilities of Malta, Gozo and Pantellaria lying within reasonable range. The number of fighter sorties necessary . . . was prodigious.

It was pointed out in my operation order . . . that much of the air effort would be unseen by the naval forces; and . . . the strength of fighters to be expected was outlined."

(29) "By results I consider that the air appreciation was proved sound. To one who had fought through the Mediterranean campaign from the beginning it appeared almost magical that great fleets of ships could remain anchored on the enemy's coast, within 40 miles of his main aerodromes. . . .

The navies (and consequently the armies) owed a great debt to the air for the effectiveness of the protection offered them throughout the operation. Nevertheless there was palpably room for improvement in the close air cover of the assault areas, and, in particular, in the effectiveness of the liaison between the naval force commanders and the fighter forces. . . ."

¹ Acid North.

2 S.E. fighter = single engine fighter.

Lessons of the Landings

- (30) "The following sums up . . . the major lessons of the landings :—
- (a) The need of a faster and more seaworthy craft for the landing of supporting arms.
 - (b) The enormous value of the L.S.T. as a means of rapid landing of reinforcements.
 - (c) The importance of the "water gap" and the need for a means of crossing it. The best means so far devised is the U.S. "side carried" pontoon ; but it is only suitable for calm seas.
 - (d) The profound effect that Dukws have had in amphibious warfare.
 - (e) The importance of early hydrographical survey of the bars to find the gaps which usually exist.
 - (f) The need for augmentation of labour in beach groups and stevedore gangs in merchant ships to ensure rapid unloading over beaches.
 - (g) The importance of senior air officers with executive powers and a full knowledge of the plan, to accompany the naval commanders in the assault.
 - (h) The importance of A.A. fire discipline, particularly in minor craft."

Routeing of Troop-carrying Aircraft

(31) "The routeing of aircraft carrying airborne troops to the attack was . . . an awkward problem. Allowance was made in the naval approach plan, in conference with Air Plans, for a gap between assault convoys north of Malta through which the troop carrying aircraft could approach and return without flying over convoys. These routes were promulgated in my operation orders, which fact appears to have been overlooked by the Naval Commander, Western Task Force, in paragraph 21 of Section I of his despatch, and in paragraph 3 of Section XXXV.

In fact these attacks were delivered without interference between the naval and air forces involved : but it was not until D — 3 that the airborne troops' plans became firm and that troop-carrier command were able finally to confirm the suitability of routes. . . . These late decisions were in large measure due to the late crystallization of the military tactical plan already referred to in paragraphs 5 to 7 above.

(32) "Later, airborne troop missions were flown on the night 10th/11th July to the Gela area and on the night of 13th/14th July to the Catania area.

In the first instance an ingress corridor over a deserted portion of coast between the two task forces was allotted and promulgated by signal. The aircraft were to fly inland by this corridor and withdraw passing to the north and west of Licata, well clear of the Western Task Force. In fact, owing to heavy ground A.A. fire and possibly due to bad navigation, large numbers of aircraft forsook the route and flew over the Western Task Force assault area concurrently with an enemy air attack. Considerable losses resulted. This is

undoubtedly the incident referred to in the Naval Commander, Western Task Force's Section, paragraph 21 of Part III, the wrong night having been quoted in error.¹

In the second instance, decision to carry out the operation was taken too late to enable routeing to be certainly promulgated to all ships. The airborne representative at my headquarters was apprised of this danger at the time. This late decision in combination with the unexpectedly late sailing of a convoy from Augusta led to a number of planes being shot down by merchant vessel gunfire. In this instance too, enemy aircraft were present to complicate the issue."

(33) "These incidents led to an enquiry being held by Allied Force Headquarters² . . .

Though not easy, the routeing of troop carrier aircraft prior to the main assault . . . presents a clear cut problem readily susceptible to solution by careful planning as was shown on the night of D — 1/D-day in "Husky".

The major problem arises in the routeing of aircraft to make drops to fulfil military tactical requirements arising after the main assaults, when the situation has become fluid, convoys are being cleared as they unload, and signal communications are inevitably congested. It was under these conditions that the incidents quoted above occurred : but the suggestion contained in the Naval Commander Western Task Force's Section XXXV, paragraph 3, that aircraft were deliberately routed over naval forces by night is not correct."³

Naval Forces other than Assault Forces

(34) "The work of the main covering force, the hinge pin of the operation, was dull and unspectacular as must ever be the case against a passive enemy. Force "H" was faced with the prospect of steady patrolling in waters within easy reach of the enemy's air bases, in conditions of moonlight and weather peculiarly suited to air attack and with a growing U-Boat threat.

It was not until 17th July (D + 7) that the reduced congestion of Malta and my appreciation of enemy intentions combined to allow this force to be withdrawn into harbour at Malta. In the interval the *Indomitable* had, not unexpectedly, been torpedoed and severely damaged. Force "H" achieved its object."

¹ Extract from Action Report, Western Task Force :—

(21) "The Air Force did promulgate by despatch to the forces at sea, the planned approach and egress of transport planes carrying paratroops on the night of D-1/D-day. Written information on the plans for the employment of paratroops was never received. . . . In point of fact the route selected by the Air Force was not suitable from a Naval standpoint. The Naval Commander, however, received this unilateral decision only after radio silence was imposed upon his forces, and he was unable to give voice to his objections. This failure by the Air Force to correlate plans and acquire the timely concurrence of the other services in order that information could be disseminated to all forces, contributed to a regrettable incident. On the night of the assault a number of the transport planes were off the prescribed route and approached the transports from the same direction as the enemy and arrived over the ships simultaneously with enemy dive-bombers."

² Report of Allied Airborne Board on Air operations in M.054666/43. (See Appendix H.)

³ Page 90. Action Report, Section XXXV, paragraph 3 :—

" . . . Had the route to be flown by the transports been submitted to the Navy for approval, a strong objection would have been made. Never would the Navy have agreed to routeing the transports over convoys and the assault areas. Although the planned route had been requested on numerous occasions, it was not submitted . . . "

(35) "The major lesson which arose from the operations of Force "H" was the importance of ensuring that our own aircraft should not fly by night in the vicinity of the battle fleet. To this problem, no good solution has yet been found which is applicable to a situation wherein our own night bombers are based at widely separated points from which they must fly past the area of operations of the fleet to reach constantly varying targets. . . ."

The problem is simply put forward as one which requires close and careful study in the planning of an operation of this nature."

(36) "The effect of the diversionary operations, "Fracture" by Force "Z" and "Arsenal" by Force "Q" and coastal forces, cannot be accurately assessed. It is presumed that they contributed to the confusion of the enemy. . . ."

(37) "The operations of Force "Q" patrolling nightly northward of the landings, were as necessary as they were unspectacular, and lacked incident. The torpedoing of *Cleopatra* by a U-Boat, and the sinking of a U-Boat by the *Ilex* and *Echo* were merely incidents of passage unconnected with the operational function of this force."

(38) "The operations of coastal forces, and, at a later stage, of the American P.T. Boats in the Straits of Messina were most gallant and determined. They nightly faced an unpleasant volume of gunfire and inflicted losses on the enemy."

(39) "The anti-U-Boat operations, both air and surface, which were instituted as soon as a U-Boat concentration on the east coast of Sicily became apparent, did not succeed in making any kills. But the U-Boat activity achieved little. . . ."

"The U-Boat kills which were made were fortuitous, notably the capture of the *Bronzo* by the 13th Minesweeping Flotilla off Syracuse and the *Laforey's* rapid revenge for the torpedoing of the *Newfoundland* off Catania."

March of Events subsequent to the Assaults

(40) "An outstanding feature of the operation was the rapidity of progress of the left wing U.S. 7th Army . . . The whole of these operations both before and after the capture of Palermo was a model of amphibious tactics . . ."

"In particular, after the capture of Palermo on 22nd July (D + 12), U.S. generalship showed that it had nothing to learn of the value of sea power, and Task Force 86¹ under Rear-Admiral Davidson, U.S.N., that it had nothing to learn of the rapid planning and execution of outflanking operation."

"The three 'end runs' executed on the north coast of Sicily saved days of costly fighting."

(41) "Progress on the east coast was less spectacular and more costly. Augusta was entered by the army on the evening of 12th July (D + 2) . . . but the situation did not really become cleared up . . . until the morning of the 13th . . ."

Two small commando operations from two L.S.I. (H) contributed to the capture of this port. From this time onward, however, no use was made by the 8th Army of amphibious opportunities. The small L.S.I.s were kept standing by . . . and landing craft were available on call: but the only occasion on which they were used was on 16th August, after the capture of Catania, when a commando landing was made, but fell short of the retreating enemy."

¹ Task Force 88.

(42) "There were doubtless sound military reasons for making no use of this . . . priceless asset of sea power and flexibility of manoeuvre: but it is worth consideration . . . whether much time and costly fighting could not be saved by even minor flank attacks . . . It must be always for the General to decide. The navy can only provide the means and advice on . . . the projected operation. It may be that had I pressed my views more strongly more could have been done."

(43) "Much use was made of naval gunfire to support the seaward flank of the 8th Army. Reports showed that such support was satisfactory and effective. Only on one occasion was heavy ship gunfire employed, when the *Warspite* carried out a brief bombardment of Catania . . ."

The end of the Operation

(44) "The operation concluded with the entry of Messina on 17th August, the U.S. 7th Army, thanks to their amphibious tactics and some prodigious road engineering feats, beating the British 8th Army by a short head for the prize."

Lessons of Operations subsequent to the Assault

(45) "The following sums up the major lessons of operations subsequent to an assault:—

- (a) The importance of a means of identifying positions of our forward troops from the sea . . .
- (b) The need of first class officers to superintend the initial opening of captured ports.
- (c) The need to form, in advance, an amphibious force for the exploitation of outflanking opportunities and its existence and value to be firmly indicated in the plan.
- (d) The difficulties of airborne troop operations described in paragraphs 30 to 32 above.
- (e) The importance of obtaining firm requirements from the army regarding the movement of their 'tail.' That of the 7th and 8th Armies was endless and was still in motion long after the final capture of the island, thereby hindering the inception and mounting of subsequent operations by continued demand for ferry by landing craft.
- (f) The need, as I suspect, for vigorous pruning by the army of the elements of that 'tail' . . .
- (g) The importance of early supply of tugs and lighters in captured areas, to release and conserve the life of L.C.T.s."

Conclusion

(46) "These remarks contain criticism where, in my view, criticism is due. Where possible the criticism is constructive and designed to avoid a repetition of such mistakes as were made. It is a cause for congratulation of all concerned that the criticisms are so few and the triumph so great."

(47) "I count myself indeed fortunate that, in the planning and execution of this, the greatest seaborne operation so far known in history, I met with a co-operation so complete and cordial as was accorded me by my colleagues General Alexander and Air Chief Marshal Tedder, and their subordinates."

(48) "Of the Navies, I can only say that I never wish to command better, and I count it a great honour that through the person of Vice-Admiral Hewitt, I was privileged to command so large and efficient a force of the United States Navy. Both the Western Task Force, under Admiral Hewitt, and the Eastern Task Force under Admiral Ramsay, performed their unaccustomed tasks in a manner befitting the highest tradition of any fighting service."

FINAL SUMMARY

This was the end of the invasion of Sicily and the beginning of the great assault on the Axis fortress which was to thunder finally on the coast of Normandy. The fall of Tunis had freed the southern shores of the Mediterranean route, but so long as the great bastion of Sicily remained intact, Italy could still threaten the sea route to the east. The Allied invasion severed the enemy's coastal communications by sea and the selection of Sicily as a point of assault emphasised the inherent power of amphibious strategy. The attack on the perimeter of a continental power forced it to an immediate naval decision, ruptured its coastal communication by sea and severely dislocated its whole system of defence. The campaign remains an outstanding example of the value of sea and air power in enabling an attack to be launched at a vulnerable point on the perimeter of a hostile territory. The impossibility of fortifying every mile of coast was proved again in Sicily. The assault was concentrated on a limited stretch of coast and the initial descent was made by a force of some seven divisions. In places the scattered defensive positions presented difficulties, but these were soon surmounted.

The most serious contingency was that of the weather which for a few hours prior to the hour of assault threatened to impose a postponement which would have deprived the assaulting force of the invaluable asset of surprise. This inevitable anxiety of amphibious operations was faced with calm consideration by all the leaders whose judgement of circumstances was entirely vindicated by events. The patient planning that culminated in the assembly off an hostile shore of the greatest seaborne force ever previously embarked was crowned with success. The coast defences were surprised by naval gunfire and all the landing points were seized and consolidated in a matter of hours. The accuracy and intensity of the naval supporting fire was a feature of the operations. The air fighter cover provided good aerial protection to the mass of shipping off the beaches and sufficed to prevent serious losses, and the enemy's low surface attacks over the land though they proved very troublesome at times, diminished and finally died away as the troops captured the airfields in their advance.

The measures adopted to guard against all forms of surface and underwater attack by small craft were comprehensive and proved effective. The enemy's attempts to attack the shipping were countered and held off by light coastal forces. The enemy submarines in their own waters did nothing more than damage two cruisers and were subjected to severe attacks which accounted for no less than eight of them. Offensive action by British submarines inflicted considerable losses on enemy shipping.

It was in Sicily, too, that several special types of landing craft of new design were first tried and proved their capacity to stand up to adverse weather conditions. The battleship and main covering forces were ready to oppose the enemy but, apart from bombarding operations, did not come into action, for the enemy fleet, immobilized by their presence, remained in port.

From the invasion of Sicily there sprang another great asset. It provided a multitude of lessons which were to prove of inestimable value in the planning of subsequent campaigns and may indeed be regarded as the model for the great assault of Europe which was to reach its stupendous climax on the beaches of Normandy. That event heralded the fall of Germany and in view of the magnitude of the issue it is not unfitting to conclude with the words of a great historian on another Sicilian expedition which ended indeed very differently for the invaders but not less momentously for the conquered. "This was the greatest of all the achievements of the war and I think also of all the events known to us in history, the most decisive for the victor, the most ruinous for the conquered. They were utterly defeated at all points and endured no small sufferings to no end. Infantry, ships, all they possessed were swept from the face of the earth This is what happened in Sicily."¹

¹ Thucydides, Book VII, ad finem.

APPENDIX A

PRELIMINARY NAVAL DISPOSITIONS IN THE MEDITERRANEAN

Preliminary to the embarkation and despatch of the expeditionary forces the naval forces of the Mediterranean and Levant commands were disposed on dates prior to the assault as follows:

BRITISH NAVAL FORCES

Preliminary Dispositions

Place	For Operation "Husky"		Local Forces
	Ships and Craft	Date	
Gibraltar ..	2 battleships 6 Fleet destroyers 1 netlayer	D — 6 D — 6 D — 7	2 destroyers of 13th D.F. 16th Fleet M/S Flotilla. 92nd M/S Trawler Group. 9th M.L. Flotilla (6 boats). 134th H.D.M.L. Flotilla (8 boats).
Mers-el-Kebir, Oran ..	2 battleships 1 aircraft carrier 9 Fleet destroyers	D — 6 D — 6 D — 6	29th M.L. Flotilla (6 boats). 117th H.D.M.L. Flotilla (6 boats). 2—10,000-ton tankers. 1—750-ton petrol tanker.
Algiers ..	4 cruisers 1 A.A. cruiser 1 monitor 6 <i>Hunt</i> class destroyers 1 A.A. ship 8th S/M Flotilla 2 destroyers of 13th D.F.	D — 5 D — 5 D — 6 D — 5 D — 6	2 destroyers of 13th D.F. 27th Trawler Group. 22nd Trawler Group. 10th A/S M/S Trawler Group. 28th M.L. Flotilla. 4 M.M.S. 2—10,000-ton tankers. 1 Fleet attendant tanker. 1—750-ton petrol tanker.
Bougie ..	—	—	11th A/S M/S Trawler Group. 18th A/S M/S Trawler Group.
Philippeville ..	—	—	25th M.L. Flotilla (6 boats). 9 H.D.M.L.s.
Bone ..	2 cruisers 8 <i>Hunt</i> class destroyers ..	D — 5 D — 5	9 M.M.S. 2—10,000-ton tankers.
Bizerta and Tunis ..	4 <i>Hunt</i> class destroyers .. 6 Fleet minesweepers .. 19th M.G.B. Flotilla .. 10th M.T.B. Flotilla .. 20th M.T.B. Flotilla ..	D — 4 D — 4 D — 4	6 Fleet minesweepers. 5th A/S M/S Trawler Group. 20th M/S Trawler Group. 77th M/S Trawler Group. 139th H.D.M.L. Flotilla. 6 M.M.S. 1—10,000-ton tanker. 1—10,000-ton diesel tanker. 3 small diesel tankers.

Preliminary Dispositions—continued

Place	For Operation "Husky"		Local Forces
	Ships and Craft	Date	
Sousse and Sfax ..	29th Trawler Group .. 4 <i>Hunt</i> class destroyers .. 13th Trawler Group .. 3rd Trawler Group .. 38 L.S.T. .. 42 L.C.I. (L) .. 36 L.C.T. .. 22nd M.L. Flotilla .. 31st M.L. Flotilla .. 4 H.D.M.L.s .. 4 L.S.I. (M) .. 1 A.A. ship ..	D — 4 D — 3 D — 2	4 H.D.M.L.s. 1 small diesel and petrol tanker. 1 small diesel tanker. 2 water tankers.
Malta ..	32nd M.T.B. Flotilla .. 33rd M.T.B. Flotilla .. 7th M.T.B. Flotilla .. 24th M.T.B. Flotilla .. 16 H.D.M.L.s .. 3rd M.L. Flotilla (10 boats) .. Up to 90 L.C.I. (L) .. 6 Fleet destroyers .. 2 Dutch gunboats .. 3 River gunboats .. 20th M.G.B. Flotilla .. 9 L.C.G. (L) .. 8 L.C.F. .. 6 L.C.T. (R) .. 4 cruisers .. 8 Fleet minesweepers .. 4th Trawler Group .. 8th Trawler Group .. 4 small tankers .. 1st S/M Flotilla, as required .. 10th S/M Flotilla .. 105th M.M.S. Flotilla .. 183rd B.Y.M.S. Flotilla ..	D — 4 D — 3 D — 2	8 H.D.M.L.s. 2—10,000-ton tankers. 2 Fleet-attendant oilers. 1—750-ton petrol tanker. 2 A.S.I.S.
Tripoli ..	4 Fleet minesweepers ..	D — 3	3 H.D.M.L.s. 1—10,000-ton tanker.
Benghazi ..	4 Bathurst minesweepers ..	D — 4	As detailed by the Commander-in-Chief, Levant.
Tobruk ..	2 tankers, 6 escorts (as detailed by the C.-in-C., Levant)	D — 4	As detailed by the Commander-in-Chief, Levant.
Alexandria and Port Said ..	14 <i>Hunt</i> class destroyers .. 3 sloops .. 6 corvettes .. 2 battleships .. 1 aircraft carrier .. 9 Fleet destroyers .. 1 fast minelayer .. 2 destroyers of 13th D.F. .. 4 Bathurst minelayers .. 2 trawlers of 17th Trawler Group ..	D — 8 D — 5	As detailed by the Commander-in-Chief, Levant. 2 Fleet-attendant oilers.

APP. A

THE INVASION OF SICILY

REPAIR AND DEPOT SHIPS

Type	Name	Disposition	Remarks
Fleet repair ships ..	" Vindictive " ..	Bizerta	
	" Wayland " ..	Ferryville	
Landing craft repair ship	" Vulcan " ..	Sousse	
S/M Depot ship	" Maidstone " (S.8)	Algiers	8th S/M Flotilla.
Coastal Forces Depot ship	" Vienna " ..	Bizerta	
M/S Depot ship	" Bude " ..	Bizerta	
M/S Depot trawler ..	" Product " ..	Bizerta	

Coastal Forces

Malta.—7th M.T.B. Flotilla, 18th M.T.B. Flotilla, 20th M.G.B. Flotilla, 32nd M.T.B. Flotilla, 33rd M.T.B. Flotilla.

Bizerta.—10th M.T.B. Flotilla, 19th M.G.B. Flotilla, 20th M.T.B. Flotilla.

The names of the ships in the above disposition are given, together with the names of their commanding officers, in Appendix I.

Landing Ships and Craft

The types of landing ships and craft employed in the assault on Sicily were those specially adapted or designed for the purpose of Combined Operations. They belonged to four groups :—

(a) Landing ships, (b) Landing craft, (c) Landing boats, and (d) Landing barges.

The first two groups were of larger types; all being sea-going vessels capable of making ocean passages; the remaining groups were carried in transports to the scene of action.

PRELIMINARY DISPOSITION OF THE UNITED STATES NAVAL FORCES

The following was the preliminary disposition of the United States Naval Forces and attached British ships in the Mediterranean.

Place	Task Force Number	For Operation " Husky "	Date
Oran	80	4 destroyers of 7th Desron	D-20.
		5 destroyers of 8th Desron	D-15.
		2 troraphips	D-8.
	85	3 minelayers	
		1 cruiser	D-17.
		9 destroyers of 15th Desron	
	86	9 destroyers of 16th Desron	
		19 transports of Divisions 1, 5, 7	
		4 minesweepers	D-10.
		6 submarine chasers	D-6.

THE INVASION OF SICILY

APP. A

PRELIMINARY DISPOSITION—*continued*

Place	Task Force Number	For Operation " Husky "	Date
Algiers ..	80	1 H.Q. ship .. 1 destroyer	D-21. D-15.
	81	8 transports of Division 3 .. 2 cruisers .. 7 destroyers of 17th Desron .. 3 old destroyers .. 2 minesweepers .. 4 submarine chasers	D-27. D-18. D-11.
	87	1 repair ship .. 1 ammunition ship	D-13. D-7.
Bizerta ..	80	17 M.T.B.s .. 10 air rescue boats 1 destroyer	D-10. D-8. D-5.
	81	2 destroyers .. 2 L.S.I. (S), (British)	D-5.
	86	1 H.Q. ship .. 2 L.S.I. (S), (British) 9 destroyers of 13th Desron .. 2 large minesweepers .. 6 motor minesweepers .. 7 A/S patrol vessels .. 26 submarine chasers .. 3 tugs .. 40 L.S.T. .. 97 L.C.T. (12), (British) 54 L.C.I. (L) .. 9 L.C.G. (L), (British) 8 L.C.F. (L), (British)	D-17. D-5.
Tunis ..	87	1 repair ship .. 1 salvage tug	D-15. D-9.
	80	6 L.S.T. .. 11 L.C.I. (L) .. 7 L.C.T.	D-12. D-10.
	81	6 motor minesweepers .. 6 submarine chasers .. 16 L.S.T. .. 19 L.C.I. (T) .. 2 tugs	D-11. D-5.
	85	13 L.S.T. .. 6 L.C.I. (L) .. 12 motor minesweepers .. 4 submarine chasers .. 2 tugs .. 8 L.C.T. .. 1 monitor (British)	D-9. D-7. D-5.

APPENDIX B

SUMMARY OF MOVEMENTS OF THE PRINCIPAL FORCES AND CONVOYS.

EASTERN TASK FORCE

Date	Time	Particulars, etc.
5th July (D - 5)	Early a.m.	3rd Division, Force "H" (<i>Howe, King George V</i> and six destroyers), sail from Gibraltar.
	a.m.	Convoy M.W.F.36 sailed from Port Said.
	1600	3rd Division, rendezvous with 1st Division, Force "H" (<i>Nelson, Rodney, Indomitable</i> and nine destroyers), off Mers-el-Kebir.
6th July (D - 4)	0700	1st and 3rd Divisions, Force "H," arrive Algiers (<i>Howe, King George V</i>), enter harbour, remaining ships fuel.
	1300	<i>Aurora</i> and <i>Penelope</i> sail from Bone to join Convoy K.M.S.18.
	About 1400	1st Division, Force "H" (<i>Cleopatra, Euryalus</i> and nine destroyers), leave Algiers.
	1400	<i>Aurora</i> and <i>Penelope</i> join K.M.S.18, off Bone. Convoy M.W.S.37 sails from Alexandria.
7th July (D - 3)	About 0001	<i>Delhi</i> sails from Algiers to join convoy K.M.F.18.
	0600	<i>Sirius</i> and <i>Dido</i> sail from Algiers, arrive Bone 1800.
	0800	Convoy M.W.S.36 in position 32° 00' N., 19° 27' E.
	1000	1st Division, Force "H," passes through position 000°, Cape Bon Lt 6'.
	1100	Convoy K.M.S.18 passes through position 000°, Cape Bon Lt 6'.
	p.m.	2nd Division, Force "H" (<i>Warspite, Valiant, Formidable</i> and nine destroyers), sail from Alexandria.
	1930	Convoy K.M.F.18, off Bone.
	After dark	<i>Aurora</i> and <i>Penelope</i> detached from Convoy K.M.S.18.
8th July (D - 2)	0400	Convoy K.M.F.19 passes Gibraltar.
	0430	Six destroyers leave Malta and rendezvous with 1st Division, Force "H," at 0530 in 35° 40' N., 14° 30' E., relieving screen destroyers which proceed to Malta for fuel. <i>Aurora</i> and <i>Penelope</i> join Force "H" at same time.

SUMMARY OF MOVEMENTS—continued

Date	Time	Particulars, etc.
8th July (D - 2) contd.	About 0900	Convoy K.M.F.18 passes through position 000°, Cape Bon Lt. 6'.
	a.m.	Convoy K.M.S.19 (Y), detached to Algiers.
	1900	1st Division, Force "H," in 32° 55' N., 15° 30' E. Force "H" destroyers rejoin, Malta destroyers detached to join Convoy M.W.F.36.
	1900	Convoy M.W.S.36 in 33° 02' N., 14° 15' E.
	1930	Convoy K.M.S.18 in 33° 39' N., 13° 06' E.
	2000	Convoy M.W.F.36 in 32° 55' N., 15° 22' E., joined by destroyers from Force "H."
9th July (D - 1)	0600	Convoy K.M.F.18 in position 34° 02' N., 13° 52' E.
	0630	2nd Division, Force "H," and escorts rendezvous with 1st Division in 32° 40' N., 19° 30' E.
	0900	15th C.S. (<i>Orion, Newfoundland, Mauritius, Uganda</i>) (Force "K"), sail from Malta.
	About 1000	Convoy M.W.F.37 sails from Alexandria.
	1130	Convoy M.W.F.36 in 34° 49' N., 14° 50' E.
	1200	Convoy M.W.S.36 in 35° 00' N., 14° 50' E.
	1200	15th C.S. (Force "K"), rendezvous with convoys in 35° 05' N., 14° 45' E.
	1200	Convoy K.M.S.18 in 35° 00' N., 14° 40' E.
10th July (D - day)	2000	3rd Division, Force "H" (<i>Howe, King George V</i> and five destroyers) (Force "Z"), leave Algiers.
	About 0001	K.M.F. 19 (Y), detached to Algiers.
	About 1130	K.M.S.19 passes through 000°, Cape Bon Lt. 6'.
	1200	<i>Sirius</i> and <i>Dido</i> leave Bone to join Force "Z."
11th July (D + 1)	2000	<i>Sirius</i> and <i>Dido</i> detached to carry out diversion, Force "Z" returns to Algiers.
	0900	K.M.F.19 passes through position 000°, Cape Bon Lt. 6'.
	About 1400	Force "Z" arrives at Algiers.

APPENDIX C

CONVOY ROUTES AND INSTRUCTIONS

(See Plan 2.)

The following detailed instructions and routes were issued to the convoys. Intermediate positions en route are omitted.

A.—Convoys from the Middle East.

(1) Convoy M.W.S. 36. (Speed of advance, 8 knots) :—

D-7/D-6	Sail from Alexandria.	Group Q + 3 sloops and three corvettes.
a.m. D-3	—	Four Bathurst M/S join from Benghazi.
D-3	—	Group Q fuel at Benghazi.
p.m. D-2	—	Four Fleet M/S join from Tripoli.
1200 D-1	Arrives position 35° 00' N., 14° 50' E.	

(2) Convoy M.W.F. 36. (Speed of advance 12 knots).

a.m. D-4	Sail from Alexandria	Group P and Group R.
p.m. D-3	—	Group Q joins from Benghazi and Group R returns to Alexandria.
p.m. D-2	—	6 Fleet destroyers of Force "K" join. Group P to Malta for fuel.
a.m. D-1	—	8 Fleet M/S join from Malta.
0600/D-1	—	4 L.C.I. (L) from Tripoli join.
p.m. D-1	—	Group P rejoins.
1200/D-1	Arrives position 34.55 N., 14.50 E.	

(3) Convoy M.W.S. 36 (X). (L.C.T. Convoy.)

1900/D-3	Sail from Tripoli as requisite	(Speed of advance 6 knots.)
1400/D-1	35° 49' N., 15° 20' E.	After arrival in 35° 40' N., 14° 30' E., to remain south of 35° 45' N. and to eastward of 14° 20' outside the 100 fm. line until required to proceed to position at 1400/D-1. (See (C) (5)).

Convoy M.W.S. 37. (Speed of advance 7 knots).

D-4	Sail from Alexandria	Escort 4 Bathurst M/S three corvettes (32nd Escort Group) and three Levant escorts.
1300/D + 2	35° 00' N., 14° 45' E.	

B.—Convoys from the United Kingdom.

Convoy K.M.S. 18. (Speed of advance 8 knots after passing Algiers.)

About D-16 Sails from United Kingdom. Escort Group B.

D-6/D-7 Pass Gibraltar.

D-5 —

D-3 —

D-2 a.m. —

D-2 p.m. —

1200/D-1 Arrive 35.00 N., 14.40 E.

Group S relieves Group B which proceeded to Algiers.

Group T and 4 Fleet M/S join from Bizerta.

Group S to Tripoli for fuel.

Group S rejoins, and relieves Group T and four Fleet M/S which join convoy K.M.F. 18.

CONVOY ROUTES AND INSTRUCTIONS—continued

B.—Convoys from the United Kingdom—continued

Convoy K.M.F. 18. (Speed of advance 12 knots)¹

About D-11	Sails from United Kingdom.	Escort Group A.
D-4	—	<i>Ulster Queen</i> to Algiers for fuel and rejoin.
D-4/D-3	—	Group U joins from Algiers.
p.m. D-2	—	Group V joins from Bone. Group A on relief to Bone.
p.m. D-2	—	Group U2 ships to Malta for S.B.F. 2 and 4 to Sfax for S.B.F. 1.
a.m. D-1	—	Group V rejoins. Group T to Bizerta on relief for fuel and to join K.M.F. 19.
1200 D-1	34° 55' N., 14° 40' E.	<i>Ulster Queen</i> proceeds independently to join S.B.F. 1.
1600 D-1	—	

Convoy K.M.S. 19. (Speed of advance 7½ knots.)

About D-14	Sails from United Kingdom.	Escort Group D.
D-3	—	K.M.S. 9 (Y) detached to Algiers.
p.m. D-1	—	K.M.S. 19 (X) continues.
2030 D + 2	Arrives 36° 00' N., 14° 06' E.	Group A joins from Bone.
2030 D + 2	Arrives 36° 00' N., 14° 06' E.	Group D on relief proceeds to Algiers.

Convoy K.M.F. 19. (Speed of advance 12 knots.)

About D-8	Sails from United Kingdom.	Escort Group C.
D-1	—	K.M.F. (Y) detached to Algiers.
a.m. D+1	—	K.M.F. (X) continues.
0100 D+3	Arrives 36° 00' N., 14° 06' mins. E.	Group T joins. Group C on relief proceeds to Bone.

C. Convoys from Tunisia and Malta.

(1) Convoy S.B.F. 1. (L.S.I. (M) Speed of advance 13 knots.)

2130 D-2	Sails from Sfax.	When joined by convoy S.B.F. 2 (L.C.I. (L)) speed of advance to be reduced to 12½ knots.
1845 D-1	Arrives 35° 49' N., 15° 20' E.	

(2) Convoy S.B.F. 2. (L.C.I. (L) Speed of advance 12½ knots.)

1600 D-1	Sails from Malta.	Joins convoy S.B.F. 1 and proceeds in company to the assault.
1900 D-1	Arrives 35° 49' N., 15° 20' E.	

(3) Convoy S.B.F. (L.C.I. (L)). Speed of advance 12½ knots.)

0430 D-day	Sails from Malta.	
0800 D-day	Arrives 35° 49' N., 15° 20' E.	

(4) Convoy S.B.M. 1. (L.S.T. Speed of advance 8 knots.)

1900 D-2	Sails from Sfax.	
0700 D-day	Arrives 35° 49' N., 15° 20' E.	

(5) Convoy S.B.S. 1. (L.S.T. Speed of advance 6 knots.)

1400 D-3	Sails from Sfax	Remains under way S.W. of Malta outside 100 fm. line, keeping north of 35° 50' N. and west of 14° 20' E. until required to proceed so as to arrive in 1530 D-1 position. (See (A) (3).)
1530 D-1	Arrives 35° 49' N., 15° 20' E.	

¹ N.B.—Between position 37° 18' N., 08° 55' E. and 36° 31.2' N., 11° 00' E., when zig-zagging is not possible, speed of advance is to be 13 knots.

Convoys from Tunisia

The escorts of convoys from Tunisia were ordered to proceed direct from embarkation ports; no fuelling arrangements being therefore necessary before the assaults. After the assaults they would fuel at Malta, Tripoli or Bizerta according to circumstances.

Second Follow-up Convoy (K.M.F. 19 (Y)) from the United Kingdom

From about D + 3 onwards, Group S should be available for the escort of convoy K.M.F. and K.M.S. 19 (Y) when the convoys were called forward.

(D) Shuttle Service Convoys after the Assault from Tunisia

Routes were laid down for Shuttle Service Convoys between Tunisia and Bark landing places. Each route was 6 miles wide (3 miles on each side of centre line). Convoys or groups of ships or craft with a speed of advance of 10 knots or more were to keep to port of the centre line, those with a speed of less than 10 knots keeping to Starboard.

These routes were : A—Sousse to Bark ; B—Bark to Sousse ; C—Sfax to Bark ; D—Bark to Sfax.

(E) Routes for Hospital Ships

Special routes were laid down for Hospital ships and their Masters were impressed with the need of adhering to them accurately in view of the numbers of known and suspected minefields. These were :—

- (1) Between the Western Assaults and Tunis, Bizerta or Bone.
- (2) Between Acid, Bark East or Bark South and Tripoli.
- (3) Between Bark West and Sousse.

In each case the return route was the reverse of the outward route.

APPENDIX D**LISTS OF SHIPS IN CONVOY**

(See Plan 5.)

B—British. D—Dutch. L—Belgian. N—Norwegian. P—Polish.
U—United States of America.

Convoy M.W.F.36 (Middle East—Assault No. 36)*For Acid North*

H.M.S. <i>Bulolo</i> ..	L.S.I. (M), H.M.S. <i>Ulster Monarch</i> .
H.Q. ship (Flag of N.C. Force "A" — Rear-Admiral (G)).	L.S.I. (S), H.M.S. <i>Prinz Albert</i> .
L.S.I. (L) ..	<i>Duchess of Bedford</i> (B). <i>Sobieski</i> (P). <i>Monarch of Bermuda</i> (B). (S.N.O.L. "G.")
L.S.P. ..	<i>Bergensfjord</i> (N). <i>Dunera</i> (B). <i>Dilwara</i> (B).
L.C.I. (L) ..	8 in No.

For Acid South

L.C.I. (L) ..	<i>Winchester Castle</i> (B). <i>Orontes</i> (B). <i>Reina del Pacifico</i> (B). (S.N.O.L. "J.")
	<i>Tegelberg</i> (D). (S.N.O.L. "H.")
L.S.P. ..	<i>Ruys</i> (D). <i>Christian Huygens</i> (D). <i>Devonshire</i> (B).
L.C.I. (L) ..	8 in No. <i>Netlayer</i> .. <i>H.M.S. Brittany</i> .

For Bark East

L.S.I. (L) ..	<i>H.M.S. Keren</i> . <i>Strathnaver</i> (B). <i>Otranto</i> (B). (S.N.O.L. "N.")
L.C.I. (L) ..	3 in No.

M.W.F.37 (Middle East—Assault No. 37)*For Acid North*

L.S.P. ..	<i>Orbita</i> (B). <i>Empire Trooper</i> (B). <i>Leopoldville</i> (L). <i>Rajula</i> (B). <i>Almanzora</i> (B). <i>Rohna</i> (B). <i>Egra</i> (B).
-----------	--

For Acid South

L.S.P. ..	<i>Kosciusko</i> (P). <i>Aronda</i> (B). <i>Takliwa</i> (B). <i>City of Canterbury</i> (B). <i>Karoa</i> (B).
-----------	--

M.W.S.36 (Middle East—Assault No. 36)*For Acid North*

M.T. store ships	<i>Tarantia</i> (B). <i>Ozarda</i> (B). <i>George B. Clarke</i> (U). <i>Harpagus</i> (B). <i>Frank B. Kellogg</i> (U). <i>Joseph G. Cannon</i> (U). <i>Leslie M. Shaw</i> (U). <i>Big Foot Wallace</i> (U). <i>Colin P. Kelly</i> (U). <i>Highland Prince</i> (B). <i>George N. Dearn</i> (U). <i>Pio Pico</i> (U). <i>Mayo Brothers</i> (U). <i>Pocohontas</i> (U). <i>Glaucus</i> (B). <i>Empire Charnian</i> .
L.S.G. ..	<i>Empire Lass</i> . <i>Nasprite</i> .
Small oilers ..	8 in No.
L.S.T. ..	404, 405, 407, 408, 323, 362, 367, 368.

For Acid South

M.T. store ships	<i>Ocean Valley</i> (B). <i>Ocean Pride</i> (B). <i>Ocean Strength</i> (B). <i>Ocean Vulcan</i> (B). <i>Ocean Peace</i> (B). ¹ <i>Ocean Hunter</i> (B). <i>Baarn</i> (D). ² <i>Jonathan Grout</i> (U). <i>Benjamin Goodhile</i> (B).
L.S.G. ..	<i>R.F.A. Ennerdale</i> .
Small oiler ..	<i>Moray Coast</i> .
L.S.T. ..	6 in No.

¹ Sunk by air attack, 12th July.

² Sunk by air attack, 11th July.

M.W.S.36 (Middle East—Assault No. 36)—continued*For Bark East*

M.T. store ship	<i>Shajehan</i> (B). ¹	<i>Ocean Glory</i> (B).	<i>Thistlemuir</i> (B).
	<i>Joseph Alston</i> (U).	<i>Fort Lawrence</i> (B).	<i>Ocean Vision</i> (B).
L.S.T.	1 in No. 422.		

M.W.S.37 (Middle East—Assault No. 37)*For Acid North*

M.T. ships	<i>Orna</i> (B).	<i>Debrett</i> (B).	<i>Zane Grey</i> (U).
	<i>Abraham Lincoln</i> (U).	<i>Ralph Izard</i> (U).	<i>William Patterson</i> (U).
	<i>Dunkeld</i> (B).	<i>African Prince</i> (B).	<i>Fort Pelly</i> (B). ²
	<i>Will Rogers</i> (U).	<i>Daniel C. French</i> (U).	<i>Abner Nash</i> (U).
	<i>O. Henry</i> (U).	<i>Kaimata</i> (B).	<i>City of Florence</i> (B).
	<i>Charles G. Curtis</i> (U).	<i>Samuel Parker</i> (U).	<i>Tower Hill</i> (B).
	<i>Fort George</i> (B).		

For Acid South

<i>Greystoke Castle</i> (B).	<i>City of Evansville</i> (B).	<i>Toronto</i> (N).
<i>Algolab</i> (D).	<i>Narvik</i> (P).	<i>Teucer</i> (B).
<i>Ocean Vesper</i> (B).	<i>Harrison G. Otis</i> (U).	<i>Timothy</i>
William T. Coleman (U).		<i>Pickering</i> (U). ³

For Bark East

Cased petrol carriers.	<i>Diomedes</i> (B).	<i>Empire Patrol</i> .
	<i>Hermelin</i> .	

K.M.F.18 (United Kingdom—Mediterranean—Fast No. 18)**K.M.F.18**

H.Q. ship	.. H.M.S. <i>Hilary</i> (Rear-Admiral Vian—R.A. "V").	
L.S.T. (I)	.. H.M.S. <i>Boxer</i> .	H.M.S. <i>Bruiser</i> .
L.S.I. (L)	.. H.M.S. <i>Glengyle</i> (S.N.O.L. "R").	
	<i>Circassia</i> (B) (Captain Bone, Vice-Commodore) (S.N.O.L. "S").	
	<i>Marnix van St. Aldegonde</i> (D).	<i>Derbyshire</i> (B).
	<i>Llangibby Castle</i> (B).	<i>Durban Castle</i> (B).
L.S.P.	.. <i>Ascania</i> (B).	<i>Batory</i> (P).

K.M.S.18A

L.S.T. (II)	.. 8 in No. 301, 406, 321, 366, 424, 319, 365, 305.	
L.S.C.	.. <i>Empire Elaine</i> (B).	
Cased petrol carrier.	<i>Gudrun Maersk</i> (D).	

K.M.S.18B (United Kingdom—Mediterranean—Slow No. 18)

M.T. store ships	<i>Devis</i> (B). ⁴	<i>Empire Cato</i> (B).	<i>Derwenthall</i> (B).
	(Commodore England).		
	<i>Stanhill</i> (B).	<i>Fort Naswaak</i> (B).	<i>Fort Buckingham</i> (B).
	<i>Fort Meductic</i> (B).	<i>Norman Monarch</i> (B).	<i>Benedict</i> (B).
	<i>Fort Lajoie</i> (B).	<i>Fort Stager</i> (B).	

Join K.M.F.18 after 1200/D — 1

Alcinous	(D).	<i>City of Venice</i> (B). ⁵	<i>Prometheus</i> (B).
	Saint Esylyt	(B). ⁵	<i>Orestes</i> (B).
L.S.G.	..	R.F.A. <i>Derwentdale</i> .	<i>Empire Confidence</i> (B).

¹ Torpedoed by U-Boat, sunk 6th July.² Sunk by air attack, Augusta, 20th July.³ Sunk by air attack 13th July.⁴ Sunk by U-Boat, 5th July.⁵ Sunk by U-Boat, 4th July.**K.M.F.19 (United Kingdom—Mediterranean—Fast No. 19)**

Personnel ships	<i>Dunottar Castle</i> (B) (Commodore Turle).	
L.S.P.	<i>Arundel Castle</i> (B).	
Personnel ships	<i>Empire Pride</i> (B).	
	<i>Cameronia</i> (B).	Tank Brigade (Group I) of Force "Y."
	<i>Ormonde</i> (B).	Airfield operating and airfield defence, plus Advance Reconnaissance Party (Group II) of Force "Y".
	<i>Letitia</i> (B) (Commodore Melhuish).	R.N. and Army Port Defence and
	<i>Banfora</i> (B).	General Hospital (Group III) of
	<i>Franconia</i> (B).	Force "Y."
Canadian reinforcements.	<i>Empress of Russia</i> (B).	<i>Nea Hellas</i> (B).

K.M.S.19 (United Kingdom—Mediterranean—Slow No. 19)

Force "X"		
M.T. store ships	<i>Empire Farmer</i> (B).	<i>Fort Walsh</i> (B).
	(Commodore Cochrane).	<i>Ocean Vengeance</i> (B).
	<i>Fort Graham</i> (B).	<i>Pacific Exporter</i> .
	<i>Fort Charnisay</i> (B).	<i>Frans van Mieris</i> (D).
	<i>Empire Archer</i> (B).	<i>Jersey Hart</i> (B).
	<i>Empire Falstaff</i> (B).	<i>Port Pembina</i> (B).
	<i>Empire Perdita</i> (B).	
	<i>Lochee</i> .	<i>Harlesden</i> (B).
		Atlantic Coast.

Tank Brigade of Force "Y"

M.T. store ships	<i>Middlesex Trader</i> (B).	<i>Elbert Cuyp</i> (D).
	(Commodore Denison).	<i>Fort Fork</i> (B).

L.S.T. (2)	.. 6 in No. 63, 64, 164, 198, 200, 418.	<i>Fort Yale</i> (B).
		<i>Empire Nerissa</i> (B).

Cased petrol ships.	<i>Jade</i> .	<i>Coxwold</i> .
---------------------	---------------	------------------

M.T. store ships	<i>City of Delhi</i> .	
	(Commodore Anchor).	
	<i>Forthbank</i> (B).	Airfield operating, Airfield
	<i>Empire Newton</i> (B).	Defences and Advance
	<i>City of Newcastle</i> (B).	Recco. Party.
	<i>Defender</i> (B).	

Collier ..	John Bakke (B).	
	Cape Howe (B).	
	Ocean Viking (B).	R.N. and Army Port
	Empire Florizel	Defence and General
	(B). ¹	Hospital.
	Ocean Virtue (B).	

Collier ..	1.	
		Group 3
		of
		Force "Y."

S.B.F.1 (North Africa—Assault Fast (Landing Craft) No. 1)

H.Q. ship	.. H.M.S. <i>Largs</i> (Flag N.C., Force "B") (S.N.O.L. "Q").	
L.S.I. (M)	.. H.M.S. <i>Royal Ulsterman</i> .	H.M.S. <i>Queen Emma</i> .
	H.M.S. <i>Royal Scotsman</i> .	H.M.S. <i>Princess Beatrix</i> .
L.C.I. (L)	.. 6 in No.	

S.B.F.2.

L.C.I. (L)	.. 20 in No.	
------------	--------------	--

S.B.S.1 (North Africa—Assault Slow (Landing Craft) No. 1)

L.S.T.	.. 1 in No.	
L.C.T.	.. 29 in No.	

S.B.M.1 (North Africa—Assault Slow (Landing Craft) No. 1)

L.S.T.	.. 28 in No.	
--------	--------------	--

¹ Sunk by air attack, Augusta, 21st July.

APPENDIX E

ORDERS FOR FORMATION AND MOVEMENTS OF RETURNING CONVOYS
SUBSEQUENT TO THE ASSAULT

An important object after the assault was the safe return of empty shipping to destinations where they were required for further service.

To achieve this the Commander-in-Chief defined his intentions as :—

- A.—To use Malta and Tripoli for the assembly of convoys from the Eastern Task Force and Algiers, for those from the Western Task Force.
- B.—To clear ships under escort from the beaches to Malta or beyond as quickly as possible until such time as adequate ports were available in Sicily.
- C.—To return warships not required for the continuance of the operation to the commands from which they had been detached.
- D.—To redispone local defence forces as requisite for the defence of captured ports and coasts.
- E.—To dispose light forces as required for the support and continuance of the offensive.

Eastern Task Force.—Return convoys from Acid, Bark East and Bark West.

Personnel ships, as ordered by the N.C.E.T.F., were to be cleared as quickly as possible from the beaches and proceed in escorted groups to Malta for assembly in convoys. Ships from Acid and Bark East enter Malta by the Northern Swept Channel. Those from Bark West pass west of Gozo and enter by the Southern swept channel.

M.T. Store ships were to be cleared from the beaches in convoy to Tripoli where they would be reassembled.

An approximate schedule of convoys was drawn up, in which the departure for beaches was subject to the rate of unloading achieved :—

Personnel Ships

Serial	From	Day	To Leave Malta	Escorts From	To Form	Destination
1	Acid and Bark, East.	a.m./D-day	D+1	Escort of M.W.S. 36.	M.K.F. 18	Clyde.
2	Bark, West	—	—	Group S	M.E.F. 36	Alexandria.
3	Acid and Bark, East.	p.m./D+3	D+4	Groups Q and X.	M.K.F. 19	Clyde.
4	Bark, West	p.m./D+3	D+4	Group T	M.E.F. 37	Alexandria.

M.T. Store Ships

Serial	From	Day	To Leave Tripoli	Escorts From	To Form	Destination
5	Acid and Bark, East.	p.m./D+3	D+5	Escorts of M.W.S. 37.	M.K.S. 18	Hampton Roads.
6	Bark, West	p.m./D+3	D+5	Group A	M.E.S. 36	Alexandria.
7	Acid and Bark, East.	D+7	D+9	Group R and 4 Fleet	M.K.S. 19	Hampton Roads.
8	Bark, West	D+7	D+9	M/S.	M.K.S. 19 (Y).	Clyde.
9	Acid and Bark, East.	D+12	D+14	Group V	M.E.S. 37	Alexandria.
10	Bark, West	D+12	D+14	As available	M.K.S. 20.	

Note 1.—The intended composition of the M.K. and M.E. convoys was given in detail.

2. Routes and timings of the M.K. and M.E. convoys were also laid down. Postponements or advancements of sailings from the assembly ports were ordered to be 24 hours unless otherwise ordered.

The escorts of return convoys to Malta and Tripoli mentioned above, would not return to the beaches but were to continue to escort the convoys onward until relieved.

Return Shipping and Craft from Bark, South

The L.S.I. (M) would first return to Sousse and embark follow-up personnel; second, return again to Sousse and stand by to embark the Immediate Reserve. They would adhere to the routes laid down for landing craft (see Appendix C).

Shuttle service of landing craft would be sailed as ordered by the Rear-Admiral, Force "B." On completion of the follow-up, they would proceed to Sousse or Sfax as ordered and stand by to embark the Immediate Reserve.

Re-disposition of Warships of the Eastern Task Force

Orders were issued covering the re-distribution of ships other than those of Force "H" and arrangements were made separately for escorts of return convoys. In these the groups concerned were specified together with their destinations and future employment. Remaining ships were to be sailed in accordance with a schedule of Serial movements as soon as the situation permitted.

Return Convoys from Cent, Dime and Joss

Ships of the assault and follow-up convoys were to be cleared from their beaches as quickly as possible in escorted groups, M.T. ships to Algiers and Combat Loaders to Oran for assembly in convoys with escorts as ordered by the N.C.W.T.F.

From Algiers, ships for the United States would be sailed in convoy, escorted by warships returning there.

U.S. warships not returning to the United States nor required on the Sicilian coast, would proceed finally to their starting bases.

H.M.S. Abercrombie

When no longer required by the N.C.W.T.F. would proceed to Algiers and H.M. Gun Support Landing Craft to Djidjelli.

Convoys to the United Kingdom and United States of America

Every effort was to be made, in order to economize escorts, to combine the sailings of ships from both Task Forces when bound for the same destination.

M.K. convoys from the E.T.F. would sail from Tripoli direct for Gibraltar. Ships for the United States of America were to be included in a G.U. section forming the port columns of the convoy.

Unless ships were obliged to call for fuel at Gibraltar the G.U. sections were to be prepared to proceed direct to the United States and would become G.U. convoys. Ships for the United Kingdom would stop at Gibraltar for inclusion in M.K. or S.L. convoys as convenient.

The Commander-in-Chief would instruct the Commodore-in-Charge, Algiers, to sail ships of the Western Task Force in G.U. convoys from Algiers as escorts were made available by the N.C.W.T.F., and to arrange also for the inclusion of ships from Oran and Casablanca.

The limits imposed on the size of convoys and the speed of ships for inclusion were :—

M.K.F., 20 ships	13 knots and above.
M.K.S., 60 ships	9 knots and above.
G.U.F., 20 ships	14 knots and above.
G.U.S., 60 ships	9 knots and above.

APPENDIX F

CONVOY ROUTES AND INSTRUCTIONS.—WESTERN TASK FORCE

(Ref. Plan 18)

Covering three phases, the detailed instructions and routes issued to the convoys are briefly summarized here:—

Phase I*Convoy N.C.F. 1.*—(North Africa to South Sicily, Fast.)

(Speed of advance 13 knots.)

1st Section

D-4 sails from Algiers.

0600 D-2. If required divides into two sections for passage of Tunisian War Channel in $37^{\circ} 16' N.$, $10^{\circ} 06' E.$ 1400 D-1 arrives $35^{\circ} 00' N.$, $13^{\circ} 50' E.$ *2nd Section*

D-5 sails from Oran and keeps astern of 1st Section (until after passing Gozo Tangent.)

Convoy N.C.S. 1.—(North Africa to South Sicily, Slow.)

(Speed of advance 8 knots.)

D-6 sails from Oran. Escort four U.S. destroyers. Follows Convoy K.M.S. 18 at five miles astern.

D-1 anchors at Tripoli.

0800 D-day sails from Tripoli for position 270° , 10 miles from Gozo Lt. and there as directed by N.C.W.T.F. to Dime area.

Note.—Routeing the L.S.T. and L.C.I. convoys through a landfall rendezvous off Gozo Lt. made possible a more accurate approach to the initial landing craft areas and at the same time supported the "Cover" Plan by allowing the convoys to maintain a base course eastward towards Malta for as long as possible.

Convoy N.C.S. 2.—(North Africa to South Sicily, Slow 2.)

(Speed of advance 8 knots.)

D-1 sails from Oran. Escort five U.S. destroyers. Follows route of K.M.S. 19. D-day arrives Algiers.

On arrival Algiers seven M.T. Store ships and one tanker to be detached to join K.M.S 19 (Y) sailing on D+3, and ten M.T. Store ships bound for Dime attack area join the Cent position of N.C.S. 2.

0001 D+4 arrives $36^{\circ} 00' N.$, $13^{\circ} 45' E.$ Thence the convoy will approach Gela via the Northern Swept Channel to anchorages assigned inside the minefield.*Convoy N.C.F. 2 (K.M.F. 19.)* (See Appendix C.)

(Speed of advance 12 knots.)

D-1 off Algiers the following United States Troop ships join K.M.F. 19, *Mexico*, *Evangeline*, *Shawnee*, *Boringen*.

The convoy follows the normal coastal route along the North African Coast passing Bizerta on D+1 and Malta on D+2.

0100 D+3 arrives $36^{\circ} 00' N.$, $14^{\circ} 06' E.$, when U.S. warships will rendezvous with it and escort the N.C.S. 3 portion to Gela.*Convoy N.C.S. 3 (K.M.S. 19 (Y))*

D+4 sails from Algiers. Consists of nine M.T. Store ships and a tanker.

D+5 pass Bizerta. U.S.S. *Chateau Thierry* joins for Syracuse.

D+7 passes Malta. When U.S. escorts take over.

D+8 arrives Dime. Two ships detached for Syracuse.

Convoy N.C.S. 4 (K.M.S. 20.)

D+7 passes Oran. Four M.T. Store ships and a tanker join with K.M.S. 20.

D+14 arrives Syracuse. The tanker being escorted to Dime by U.S. escorts.

Convoys N.C.S. 4A and N.C.S. 5 would be formed at North African ports at later dates and further instructions would be issued.

Landing Craft Assault Convoys (II)*Convoy T.J.F. 1 (L.C.I. (L)).* (Speed of advance $12\frac{1}{2}$ knots.) From Bizerta and Sousse.D-4 arrives $37^{\circ} 15' N.$, $10^{\circ} 25.5' E.$ 0140 D-1 $35^{\circ} 57' N.$, $10^{\circ} 43' E.$ Sousse portion joins.1600 D-1 arrives $36^{\circ} 04' N.$, $14^{\circ} 07.5' E.$ position tangent.*Convoy T.J.M. 1. (L.S.T.)* (Speed of advance 8 knots.). From Bizerta and Tunis.1030 D-2 rendezvous in $37^{\circ} 15' N.$, $10^{\circ} 25.5' E.$, but if divided for passage of Tunisian War Channel, then 2nd Section passes above position 1 hour later.1600 D-1 arrives $36^{\circ} 04' N.$, $14^{\circ} 07.5' E.$ position tangent.*Convoy T.J.S. 1. (L.C.T.)* (Speed of advance $6\frac{1}{2}$ knots.) From Bizerta and Tunis.1230 D-2 rendezvous in $37^{\circ} 15' N.$, $10^{\circ} 25.5' E.$, but if divided for passage of Tunisian War Channel, the 2nd Section passes above position 1 hour later.1800 D-1 arrives $36^{\circ} 14.7' N.$, $13^{\circ} 59.7' E.$ **Shuttle Service Convoys Routes***B.—Routes for Shuttle Service Convoys after the Assault*

These were established between the landing places of the Western Task Force in Sicily and the Tunisian War Channel and ran through positions laid down, each route was 6 miles wide. Convoys or groups of ships with a speed of advance of 10 knots and above kept to port of the centre line, those below 10 knots keeping to starboard. As the Tunisian War Channel was only 2 miles wide accurate navigation was necessary.

C.—Routes for Hospital Ships

These were similar to those laid down for the Eastern Task Force. (See Appendix C.)

In Phase II, some 60 ships were allocated to the follow-up convoys, these supplemented the turn round of landing craft in loading and transporting further elements of the 7th Army. Two convoys sailed from Oran and Algiers on D-3 and D-4 and one (K.M.F. 19) from the U.K., passing Algiers on D-1.

When the shuttle service commenced Bizerta was the base for landing craft carrying supplies, and Tunis for those carrying personnel and vehicles.

In Phase III, there were movements of troops additional to the Assault Forces; this involved a continual shuttle service of landing ships and craft from Tunisian and Tripolitan ports. Phase III commenced before the completion of Phase II and was continued in accordance with the plans providing for the distribution of forces in Sicily as a basis for further offensive operations.

THE INVASION OF SICILY

APPENDIX G

LOSSES AND DAMAGE TO BRITISH AND ALLIED SHIPS AND LANDING CRAFT
EASTERN TASK FORCE

I. H.M. Ships Lost

Date	Name	Type	Cause
3rd July ..	429 ..	L.S.T. ..	Fire. Sank in 35° 6' N., 11° 52' E.
8th July ..	547 ..	L.C.T. ..	Foundered in heavy weather in 34° 48' N., 12° 25' E.
10th July ..	913 ..	L.C.P. (R) ..	Fire, shell splinter, Bark East sector.
10th July ..	Talamba ..	Hospital ship ..	Bomb, air attack, sunk in Acid area.
15th July ..	641 ..	M.G.B. ..	Gunfire, batteries, Messina Straits, sunk.
17th July ..	316 ..	M.T.B. ..	Gunfire, sunk off Reggio, shore battery.
21st July ..	288 ..	M.T.B. ..	Sunk in Augusta harbour, air attack.
27th July ..	63 ..	M.T.B. ..	Bomb, air attack, Syracuse.
27th July ..	353 ..	L.C.T. ..	Bomb, air attack, Syracuse.
11th August ..	Parthian ..	Submarine ..	Unknown, S. Adriatic.
15th August ..	665 ..	M.T.B. ..	Gunfire, batteries, Messina Straits, sunk.
18th August ..	Saracen ..	Submarine ..	Sunk by German escort vessel, off Bastia.
18th August ..	416, 301 ..	L.C.T.s ..	Explosion in L.C.T. 416, Tripoli.

II. H.M. and Allied Ships Damaged

Date	Name	Type	Cause
10th July ..	254 ..	L.C.A. ..	Mortar fire, Bark South sector.
11th July ..	Dorsetshire ..	Hospital ship ..	Bomb, air attack off Bark East area.
12th July ..	Brissenden, Blankney	Destroyers ..	Collision off Cape Passero.
12th July ..	Eskimo ..	Destroyer ..	Bomb, air attack, off Cape Murro di Porco.
15th July ..	Roberts ..	Monitor ..	Gunfire accident.
16th July ..	77 ..	M.T.B. ..	Gunfire, in action with E-Boats, Messina Straits.
16th July ..	Indomitable ..	Aircraft carrier ..	Torpedoed by aircraft in 36° 22' N., 18° 8' E.
16th July ..	Cleopatra ..	Cruiser ..	Torpedoed by submarine in 39° 13' N., 16° 00' E.
17th July ..	Queen Emma ..	L.S.I. (M) ..	Bomb, near miss, air attack, Augusta.
19th July ..	75 ..	M.T.B. ..	Gunfire, coast battery, off Reggio.
19th July ..	570 ..	L.C.T. ..	Fire, air attack, Acid sector.
20th July ..	Nubian ..	Destroyer ..	Bomb, near miss, air attack, Malta.
21st July ..	Adrias (G), Quantock	Destroyers ..	Gunfire, action with E-Boats north of Augusta.
23rd July ..	Newfoundland ..	Cruiser ..	Torpedoed by submarine off Syracuse.
24th July ..	Erebus ..	Monitor ..	Bomb, near miss, air attack, Augusta.

THE INVASION OF SICILY

Losses and Damage to British and Allied Ships and Landing Craft—continued

Eastern Task Force—continued

II. H.M. and Allied Ships Damaged—continued

Date	Name	Type	Cause
27th July ..	541 ..	L.C.M. (3) ..	Bomb, near miss, air attack, Acid area.
27th July ..	353, 300 ..	L.C.T.s ..	Bomb, air attack, Syracuse.
30th July ..	424 ..	L.S.T. ..	Mine, off Sousse.
1st August ..	660, 657 ..	M.G.B.s ..	Gunfire, in action with E-Boats.
4th August ..	Arrow ..	Destroyer ..	Fire and explosion in S.S. Fort la Montee at Algiers.
5th August ..	Soemba (D) ..	Gunboat ..	Gunfire, coast batteries, Messina Straits.
9th August ..	265 ..	M.T.B. ..	Gunfire, shore batteries, Messina.
10th August ..	Tynedale, Nubian ..	Destroyers ..	Bomb, near miss, air attack, Augusta.
15th August ..	414 ..	L.S.T. ..	Torpedoed by aircraft 35' S. of Carni Rocks.
19th August ..	Ulster Monarch ..	L.S.I. (H) ..	Bomb, air attack in position 330°, Cape Bon, 5 miles.

III. Merchant Vessels Lost

Date	Name	Convoy	Cause
4th July ..	City of Venice, St. Essylt	K.M.S.18B	Torpedoed by submarine in 36° 47' N., 1° 27' E.
5th July ..	Devis ..	K.M.S.18B	Torpedoed by submarine in 37° 1' N., 4° 10' E.
6th July ..	Shahjehan ..	M.W.S.36	Torpedoed by submarine in 33° 1' N., 21° 32' E.
11th July ..	Baarn (D) ..	—	Bomb, air attack in Acid area.
12th July ..	Ocean Prince ..	—	Bomb, air attack in Acid area.
13th July ..	Thomas Pickering ..	—	Bomb, air attack in Acid area.
16th July ..	Bjorhang (N) ..	—	Explosion at Algiers.
16th July ..	Fort Confidence ..	—	Fire, result of explosion in Bjorhang, Algiers.
20th July ..	Fort Kelly ..	—	Bomb, air attack in Augusta harbour.
21st July ..	Empire Florizel ..	—	Bomb, air attack at Augusta.
25th July ..	Fishpool ..	—	Bomb, air attack at Syracuse.
26th July ..	El Argentino ..	K.M.S.21	Bomb, air attack in 39° 50' N., 13° 38' W.
27th July ..	Halizones ..	K.M.S.21	Bomb, air attack in 38° 4' N., 12° 59' W.
1st August ..	Ushside ..	—	Bomb, air attack, Palermo.
4th August ..	Thorsvodi (N) ..	—	"Limpet" attack in Gibraltar Bay.
4th August ..	Fort la Montee ..	—	Fire and explosion at Algiers.
6th August ..	Contractor ..	C.T.X.5 ..	Torpedoed by submarine in 37° 18' N., 7° 18' E.
9th August ..	Empire Commerce ..	—	Fire, Algiers.
15th August ..	Warfield ..	K.M.S.23 ..	Bomb, air attack, off north coast Africa.
16th August ..	Empire Kestrel ..	U.G.S.13 ..	Torpedoed by aircraft in 37° 02' N., 4° 44' E.